POPTAC Methodology Subcommittee Meeting January 28, 2005

The meeting was called to order by David Lillie at 9:33a.m.

Harry Wolfe made a motion, duly seconded by Sandy White, to approve the minutes from the December 3 subcommittee meeting. The members unanimously approved.

Susan Kanzler stated that LaPaz and Mohave counties were corrected, but the detailed table was not yet e-mailed. She continued by talking about average growth (2001-2004) and average annual growth (2000-2004) for counties and state.

Tom Rex said to discard the first set because it is not mathematically acceptable.

Susan Kanzler explained that with the first set she was looking for numbers that would give the highest numbers for counties. She also said the first set was perfectly good.

Alberta Charney said the rapid growth of Pinal County did not occur until the end of the decade—meaning that the 1990 to 2000 growth rate would not adequately capture the current growth rate in Pinal County.

Tom Rex said that the 1995 to 2000 migration rates are not adequate to explain the next 50 years.

Although Alberta missed the last meeting, she said Tom's suggestion was to run Pinal and Maricopa counties together.

Susan Kanzler said she did than run and explained how she did it. She created a new set of inputs with new migration rates and made a comparison of the result of combined counties to the sum of the two counties (Pima and Maricopa). She continued her explanation with additional details. She also looked at survival rates and input data. Her conclusion was that the population projected for Maricopa County was lower than the combined population of the two counties run together (numbers were negatively impacted due to more mortality, especially ages 90 and over).

Harry Wolfe said he supplied number of housing units approved for construction in Pinal County, which he referred to as "known development." This can be used to gauge build out. It also can be done for Yavapai and Yuma counties, and for other rapidly growing counties. In Eloy, for example, thousands of units are planned for the next few years—not 20 or 30 years from now.

The idea is to look at planned units because they could cause potential spikes in the growth rates.

Tom Rex and Alberta Charney continued with the discussion. Tom Rex commented that in the past we got more input for the projection process as far as developments. Then, he posed the question: How do you go from developments to population?

Tom Rex also said that growth is shifting from Maricopa County to Pinal County. As the fringe of growth passes to Pinal County, metropolitan growth shifts, and how do you account for that, especially with a model done consistently across all areas? Then, he stated that private sector models use a lot more judgment. He concluded, until then [without adjustments], you will not come up with these numbers.

Harry Wolfe said we see a number of cities reaching build out. Also, areas on the West side are growing (e.g., Buckeye). The Chair mentioned Surprise and El Mirage.

Tom Rex said that resource limits are not being considered in the model the projects out 50 years.

Tom Rex said that the last set of projections showed a population of 7 million by 2050. Now, these population projections show over 8 million. We don't have the luxury to ignore these issues (limits imposed on growth).

John Fortune continued the discussion talking about the AMA and 32,000 plots of land for housing construction. He said that multiplying 32,000 by 2.5 persons per household, generates 80,000 people with the right to build without an assured water supply.

Mila Hill prepared a report and she said Pinal County has the largest growth rate between 2000 and 2003 (11%). She continued talking about housing units, the tax base, and aerial photographs. She said POPTAC could use GIS, and information could be shared, but does not know how all of this could translate to a model.

Harry Wolfe said we will have to evaluate growth rates over time...this is the time to introduce this issue. He further explained that Peoria's population was reduced by 100,000 after the control total.

Tom Rex replied that it needs to be done before (not after the control).

Alberta Charney said we can't put this adjustment into the model. It would require completely applying a new model. An adjustment can be made in the first 10 years only.

Tom Rex said it was a Mountain West model that was first used in 1992. In the past it was used to account for the economic cycle in the very earliest years.

The discussion continued a short time, and then, Chris Fetzer said the current projections are 8 years old and nobody is using them anymore. He said that we have a credibility issue, and if we can't account for new development (growth), it will create an even bigger issue. He cautioned that we don't need to really rush [producing a new projection series].

Linda Strock said she disagreed. She said we need to update the projections and that we do have a sense of urgency. Although we need something that works ideally, it would delay the process and that is not an option at this time. She further explained that DES is certainly receptive to looking at the issues. Linda also said that Alberta Charney helped DES review the model, but that was over a decade ago. Finally, Linda said DES is looking at putting together some type of task force.

The discussion continued with comments about "Maricopa-Pinal" issues. [participants: Alberta Charney, Peter Kozy, Harry Wolfe, Tom Rex, Susan Kanzler, and Linda Strock] During this discussion, it was stated that we can't wait forever for new projections.

Harry Wolfe said the demographic model works well with Maricopa-Pinal counties. The concern is for fast growing areas, such as Pinal County, and we need to account for that growth.

Linda Strock said she has confidence in the Maricopa County run plus the combined run.

Tom Rex said it is too premature to draw conclusions like that. Tom also said that it would be useful to look at the combined model [Maricopa-Pinal] in response to Linda's question bout interest in the combined model. Linda also commented on the limitation of how to translate known developments into the model and how to use judgmental factors; namely, allocating growth to the fringe.

Tom Rex thought the combined run produced a better total, but asked how growth would be distributed between the two counties. Tom also said the migration looked stable for the 1997 projections (without saying those are better projections). He said the main issue is to find out why the combined run is higher. The projection's model shows population slowing down instead of steady population growth.

Susan Kanzler said that some adjustments were made to the 1997 projections.

Tom Rex said differences in the long term need to be analyzed. He stated that it needs to be done even thought it involves a fair amount of work.

Alberta Charney asked if Mohave and Yuma counties were low. Tom Rex answered. A short discussion ensued between Alberta and Tom.

After the Chair asked if there is anymore discussion, Harry Wolfe asked about having another subcommittee meeting before the March 18th POPTAC meeting.

Linda Strock replied by stating that more time would be spent preparing for the meeting than working on the model.

Alberta Charney asked about comparing input rates [migration] on the models.

Susan Kanzler explained the problem (five-year cohorts vs. single-year of age so that it is hard to tell if compatible; can't reconstruct cohorts without a software program)

Peter Kozy said data could be shared by e-mail.

Alberta Charney asked about the approval item on the POPTAC agenda for today (County Projections, Attachment C).

Linda Strock answered that POPATC members could decline to take action. She added comments about what would be the goal of the next POPATC meeting and the direction to take if the county projections were not approved.

Mila Hill asked Samuel Colon about building permits.

Tom Rex said we already have building permits for the late 1990s. It shows an upsurge in permits in Pinal County. Tom continued his comments about the permit data.

Tom Rex said we need to investigate. He said we need solid information about what is going on--until then, we can't think about making adjustments.

From the discussion several suggestions were made that would keep Susan Kanzler busy for a long time (Tom Rex made several suggestions).

Alberta Charney said that because so many things were thrown at Susan, a few specific things should be specified. She said Pinal is a key one, and after that, we can meet as a subcommittee. She also thought that some suggestions were broad and it could take months.

Linda Strock said that planned units are not an input for the model. The issue is how to translate that into an add factor [for the model]. Previously, Linda mentioned looking at factors not build into the model. Alberta said we can't other than to incorporate changes during the add factor process. Susan Kanzler said it would involve rewriting the model, and then, you could include information for every year that you have data.

The discussion continued for a short time. Susan explained some runs, the control, and birth rates (DHS birth rates are higher than expected, i.e., higher than one would predict with the model).

Linda Strock suggested the following strategy: (1) Look at add factor options for planned units in each county; (2) Look at the Maricopa residual—growth pushing into an adjoining county; and (3) Other after determining what was learned from the first activities.

Tom Rex said there are other issues that need to be done before Nos. (1) and (2) are done. We need to first look at why the long-term trend is down. Tom suggested that we look at three issues first and then consider Nos. (1) and (2).

Tom Rex talked about the migration rates and that the rate declines as the base gets larger. His three issues are:

*Tie migration to numeric growth rather than percent growth (we need to understand the migration "drop" issue in the model and make comparisons to the 1997 model projections; we are tying four years of the best guess of growth).

*The 2004 estimate may not be representative of the actual population (what if the 2004 estimate is too high?).

*Change the population control totals (use the 1995-2000 Census Bureau migration rates instead of the 2000-2004 DES estimates). [the only actual run made was for the state]

Alberta Charney said she thought that was used in the model.

Tom Rex replied with a no. It always was adjusted to the estimates. Then, he said we can't support the estimates method especially with what is going on I the real estate market.

Alberta Charney said she would feel for comfortable using the 1995-2000 migration rates [Census Bureau], but that we still should start with the DES estimates.

Tom Rex replied that we should look at each--one at a time. Tom also mentioned high growth rates with employment that is not so high. A short discussion followed with Tom's conclusion that this should be investigated further.

Linda Strock said in the interest of time, these suggestions will be done one at a time and shared as it is being produced.

Tom Rex said to run the state first, then, see if it needs to be run for each county.

Susan Kanzler said she would e-mail the subcommittee members her list of what to do.

Peter Kozy said we don't want to go down a blind alley.

David Lillie adjourned the meeting at 10:47a.m.

*The sign-in sheet shows 18 in attendance, including Alberta Charney who called from Tucson, and four people joining at the tail end of the meeting.